DETAILED ACTION

Status of Claims

1.   Applicant has amended claims 17, 23, 33 and 78. Claims 1 – 16, 18 – 22, 23 –

32, 34 – 38, and 40 – 73 were previously canceled due to an earlier restriction

requirement. Claims 96 and 97 have been added. Thus, claims 17, 23, 33 and 74 – 97

are pending in this application and are presented for examination.

Response to Arguments

2.   Applicant's amendment to correct objection to claim 33 has been considered

and, in turn, Examiner has withdrawn objection.

3.   Applicant's amendment to correct 35 U.S.C. §112, 2nd paragraph rejections to

claim 78 has been considered and, in turn, Examiner has withdrawn rejection.

4.   Applicant's amendments to correct 35 U.S.C. § 101 rejections to claims 17, 23,

33 and 74 – 95 have been considered and, in turn, Examiner has withdrawn rejections.

5.   Applicant's arguments filed 30 June 2008 with respect to claims 17, 23, 33 and

74 – 96 have been fully considered but they are not persuasive.

6.   Applicant argues that **Florance, et al** (USPub. No. 2002/0065739) does not

disclose "a method for providing a daily cash index for real estate transaction values" as

recited in independent claim 23 of the present invention [Response to Office Action of

February 27, 2008, page 9 of 17, lies 14 – 16]. Examiner respectfully disagrees.

        Florance clearly discloses creating of indexes and derivatives as applied to real

estate investments, specifically rental rates and occupancy rates [0105]. **Florance**

discloses services such decision support, tenant information, sales information and

property marketing which receive daily service updates [0052]. Daily updates of these

services are inclusive of indexes which reflect such information as decision support,

tenant information, sales information and property marketing. Thus, Examiner interprets

receiving daily service updates as indicative of Applicant's generating daily cash index of

real estate transaction values.

Applicant presents similar arguments [page 10 lines 25 -30; page 11, lines 11 -

16; page 11 last line to page 12 line 3]. Examiner notes that terms such as "in the local

region" and "based upon a survey" are statements of intended use, which do not add

any patentable weight to the claim.

Language that suggests or makes optional but does not require steps to be

performed or does not limit a claim to a particular structure does not limit the scope of a

claim or claim limitation. The following are examples of language that may raise a

question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,

- (B) "adapted to" or "adapted for" clauses,

- (C) "wherein" clauses, or

- (D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

7.   Regarding claim 17 and 33, Applicant argues **Kevenides** fails to teach

"generating a volatility value based upon the monthly cash indices over at least one year

as a measure of historical performance" and "for each month, aggregating the daily

surveys on a monthly basis to generate a monthly cash index for said each month; and

updating the volatility value based upon each monthly cash index" [page 14 of 17, lines

18 – 25]. Examiner respectfully disagrees.

Examiner affirms his interpretation of *Value at Risk* (*VAR*) as Applicant's

volatility value in that VAR is a statically measurement which has become a measure of

potential losses rather than a measure of potential gains [**Kevenides** page 2, last paragraph]. Examiner affirms his interpretation of *historical data* as Applicant's **indices over a plurality of years.**

Examiner concedes Applicant's argument that **Kevenides** fails to explicitly disclose generating the volatility value based upon the monthly cash indices over at least one year as a measure of historical performance. However, **Rothstein** teaches method of deriving a market index by gathering data applicable to real estate transactions [Abstract]. **Rothstein** teaches analyzing volatility in a real estate market over a compilation period of one year, with a market index calculated each month or, alternately, semiannually, biweekly, weekly or even daily [column 3, lines 37 – 59].

8.   Applicant's arguments with respect to independent claims 17, 23, and 33, and the dependent claims 78 – 81, 86, 91, 92, and 95 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

9.   Claim 97 is objected to because of the following informalities: the word "hectacre" should be written "hectare". Appropriate correction is required.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 17, 23, 33, 78-81, 86, 91, 92, and 95 are rejected under 35 U.S.C. 103 (a)

as being unpatentable over **Florance, et al** (USPub. No. 2002/0065739) as supplied by

Applicant, in view of **Kevenides** ("International real estate investment risky analysis",

Real Estate Issues, Chicago: Fall 2002. Vol. 27, Iss. 3/4; pg. 61, 13 pgs), in further view

of **Rothstein et al** (US Patent No. US 6,058,369).

12.   Regarding **claims 17 and 23, Florance** teaches:

•   for each day, performing a survey of actual real estate transactions executed

on said day in a local region [see paragraph 0038, 0054];

•   generating a daily cash index of real estate transaction values in the local

region based upon the survey, the daily cash index being expressed as a price per unit

and usable as a daily settlement value in a real estate based securities market [see

paragraph 0052] - clients receive daily service updates [see paragraph 0105].

Examiner interprets *creation of indexes* as similar to Applicant's **generating a**

daily cash index. Florance further teaches indication of a property for which

information is recorded in the database; such data include a price per square foot of

property [see 0204].

Florance teaches:

•   for each month, aggregating the daily surveys on a monthly basis to generate

a monthly cash index [see paragraph 0054]. Examiner interprets *continuously*

assembled and updated as equivalent to Applicant's **aggregating the daily surveys**;

Florance does not explicitly disclose:

•   generating a **volatility value** as a measure of historical performance.

However, **Kevenides** discloses challenges of international real estate investment involving country funds [page 2, last three paragraphs]. **Kevenides** further discloses *Value at Risk* (VAR) which is the amount of money an institution could make or lose from changes in the price of the underlying assets; VAR is a statistical estimate based on historical data [page 2, last paragraph]. Examiner interprets *Value at Risk* (*VAR*) as Applicant's **volatility value.**

Examiner interprets *historical data* as Applicant's **indices** over at least one year. This is evident in **Kevenides'** disclosure that the length of the chosen historical period has an impact on calculating value at risk [page 3, 2nd – 5th paragraph]. He discloses under MEASURING, ANALYZING, AND FORECASTING RISKS [page 6], periods in history which were innovative and productive included the first-half of the 20th century as well as the 1990's [page 6, 6th paragraph].

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the **Florance's** invention to include *Value at Risk* (VAR) as disclosed by **Kevenides** because an individual or institution investing real estate can use VAR as a measure of potential losses rather than measure of potential gains [**Kevenides** page 2, last paragraph].

Examiner notes that **Kevenides** does not explicitly disclose:

- generating the volatility value "based upon the monthly cash indices over at least one year as a measure of historical performance" (emphasis added).

However, **Rothstein** teaches method of deriving a market index by gathering data applicable to real estate transactions [Abstract]. **Rothstein** teaches analyzing volatility in a real estate market, over a compilation period of one year, with a market index calculated each month or, alternately, semiannually, biweekly, weekly or even daily [column 3, lines 37 – 59].

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the **Kevenides'** invention to include *generating a volatility value based upon the monthly cash indices* as disclosed by **Rothstein** because such volatility factors may be used to track the housing industry and related employment opportunities for those who rely upon the real estate market for their livelihood [**Rothstein** column 1 lines 20 - 33].

13.   Regarding **claim 33, Florance** and **Kevenides** teach all the limitations of claim 17 which are also included in this claim.   In addition, **Florance** teaches:

- based upon historical data, generating monthly cash indices of real estate values in a **local region** [see paragraph 0078 - geographic region]; for each month of at least 10 prior years [see paragraph 0257 - analyze transactions over a long period of time (e.g., ten years) to provide valuable historical performance data].

- generating a initial volatility value based upon the monthly cash indices over said at least **10 prior years** [see paragraph 0257];

14.   Regarding **claim 78, Florance** teaches real estate transaction as inclusive of residential real estate [see at least 0088].

15.   Regarding **claims 79 and 80,** the limitations:

- the daily cash index is aggregated on a monthly basis to provide a monthly index value, and

- generating a volatility value of the daily cash index, said volatility value being a function of a historic performance of the daily cash index

further limit claim 23, which is broader than claim 17. However, these limitations are substantially similar to limitations of claim 17 as were discussed in the rejection of claim 17 above.

16.   Regarding **claim 81,** the limitation:

* the historic performance is a function of aggregated monthly values of the

daily cash index over a **plurality of years**.

is disclosed by **Florance** as discussed in the rejection of claim 33.

17.   Regarding **claims 86 and 91, Florance** teaches the limitations

* the real estate transactions include **residential** real estate transactions [see

paragraph 0088 - data gathering and dissemination to both **residential** and commercial

real estate], and

* the real estate transactions include **residential** real estate transactions and

the real estate values include **residential** real estate values [see paragraph 0088].

18.   Regarding **claim 92,** the limitations:

* periodically aggregating the daily surveys to generate a periodic cash index;

* generating a volatility value based upon the periodic cash indices over a

plurality of years.

further limit claim 23 so as to render this claim substantially similar to independent

claim 17. Therefore, this claim is rejected for the same reasons as claim 17.

19.   Regarding **claim 95, Florance** teaches:

* the daily cash index is calculated as a price per square foot [see paragraph

0133 and 0134 - Examiner notes that *stored data representing square footage* is

indicative of Applicant's **daily cash index calculated as a price per square foot**; see

paragraph 0106].

20.   Claims 74, 75, 77, 82, 83, 85, 87, 88, 90, 93, 94, 96, and 97 are rejected under

35 U.S.C. 103 (a) as being unpatentable over **Florance** in view of **Kevenides** in further

view of **Rothstein** as applied to claims 17, 23 and 33 above, and further in view of

Official Notice.

21.   Regarding **claims 74, 75, 82, 83, 87, and 88** the limitations that the daily cash

index is calculated on

- a weighted average basis, or

- a moving average basis

are standard numerical techniques used in the financial industry. Examiner takes

Official Notice that these numerical techniques are old and well known.

         Therefore, it would have been obvious to a person having an ordinary skill in the

art at the time of the **Florance's** invention to include *a weighted average basis* or *a*

moving average basis for calculating the daily cash index because these are standard

numerical techniques used in the financial industry.

22.   Regarding **claims 77, 85, and 90,** the limitations that the daily cash index is

weighted according to building classes (i.e. Class A buildings, Class B buildings, and

Class C buildings) are old and well known in the real estate industry. Examiner takes

Official Notice that buildings are classified as Class A, Class B, or Class C buildings

due to their desirability (i.e. ability to attract higher quality tenants) in commercial real

estate.

         Therefore, it would have been obvious to a person having an ordinary skill in the

art at the time of the **Florance's** invention to include *building classes* for calculating the

daily cash index because the volatility value would be a strong function of the ability to

find and keep higher quality commercial tenants.

23.   **Claim 93 and 94** are substantially similar to claim 92 excepting that a volatility

factor is being generated based on weekly and biweekly cash indices. Examiner takes

Official Notice that generating "factors" based on a **weekly** or **biweekly** data as

opposed to "**periodic**" or **monthly** data is often applied in basic business methods. An

example of this is paying of a company's employees.   Some companies pay employees

weekly, some biweekly, some monthly. One of ordinary skill in the art at the time of

Florance's disclosure would be aware of such business practices.

Therefore, it would have been obvious to a person having an ordinary skill in the

art at the time of the **Florance's** invention to include generating "factors" based on a

weekly or **biweekly** data because a user would be able to generate a volatility factor if

market conditions change more quickly.

24.   **Regarding claims 96 and 97,** the limitations:

- the price per unit is indicated as a price per square foot, a price per square

meter, price per acre and a price per hectacre [sic].

 are standard units of measure in real estate valuation. Examiner takes **Official**

Notice that expressing prices in these units are old and well known.

Therefore, it would have been obvious to a person having an ordinary skill in the

art at the time of the **Florance's** invention to price real estate based on square footage,

square meters, or acreage because these are standard units of measure used in real

estate investment.

25.   Claims 76, 84, and 89 are rejected under 35 U.S.C. 103 (a) as being

unpatentable over **Florance** in view of **Kevenides** in further view of **Rothstein** as

applied to claims 17, 23 and 33 above, and further in view of **Hoadley** ("Options Strategy

Analysis Tools", website "www.hoadley.net/options/BS.htm". December 18, 2002).

26.   Regarding **claims 76, 84, and 89**, the limitation that the daily cash index is

calculated on an exponential moving average basis is not disclosed by **Florance,**

Kevenides, or **Rothstein**.

However, **Hoadley** discloses determining volatility of option prices using an

exponentially weighted historical volatility estimation using the EWMA (exponentially

weighted moving average) model [page 2, bottom – page 3, top]. Examiner interprets

exponentially weighted moving average Applicant's **exponential moving average.**

Therefore, it would have been obvious to a person having an ordinary skill in the

art at the time of the **Florance's** invention to include *exponentially weighted moving*

average as disclosed by **Hoadley** to calculate the daily cash index because the

exponentially weighted moving average model gives greater emphasis to more recent

prices [page 3, top].

Cited Prior Art

27.   The prior art of record and not relied upon is considered pertinent to Applicant's

disclosure.

- **Kramerich et al**: "System for indexing pedestrian traffic", (US Patent No.

7,415,510 B1) – **Kramerich** discloses a system and a method for indexing pedestrian

traffic wherein the data are collected daily from providers and compiled into an index.

Kramerich has applied his disclosure to real estate investment.

Conclusion

28.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Baird whose telephone number is (571)270-3330. The examiner can normally be reached on Monday - Thursday 7:30 am - 5:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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applications may be obtained from either Private PAIR or Public PAIR. Status

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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